

AMENDMENTS TO THE CLAIMS

The following represents a complete listing of the claims submitted in the present application including the present status of each and any amendments being made by this paper. It is intended to replace all prior versions of the claims in this application. Any claims canceled in this application are canceled without prejudice and applicants specifically reserve the right to pursue such claims in continuing or divisional applications in the future.

By this paper claims 71-75, 80 and 83-84 have been canceled and claims 53, 79, 82, 85 and 86 have been amended.

Listing of the Claims

1-52(canceled).

53(currently amended). A An in vitro method of suppressing the expression of a selected gene in a eukaryotic cell, the method comprising introducing into the cell (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene, which site is present in a eukaryotic genome, and a chromatin inactivation portion, or (b) a polynucleotide encoding said polypeptide, wherein the chromatin inactivation portion of the polypeptide is ~~selected from all or a N-CoR or SMRT-binding part of~~ PLZF and wherein the nucleic acid binding portion of the

polypeptide is estrogen receptor (ER) or androgen receptor (AR)
~~selected from all or a DNA binding part of a nuclear receptor~~
~~DNA binding protein.~~

54-56 (canceled).

57 (previously presented). A method according to claim
53 wherein the chromatin inactivation portion facilitates
histone deacetylation.

58-77 (canceled).

78 (previously presented). A method according to claim
53 wherein the nucleic acid binding portion and the chromatin
inactivation portion are fused.

79 (currently amended). A method according to claim 53
wherein the eukaryotic cell is selected from an animal cell ~~and~~
~~is contained within an animal~~ or a plant cell ~~and is contained~~
~~within a plant.~~

80 (canceled).

81 (previously presented). A method according to claim
53 wherein the expression of a plurality of selected genes is
suppressed.

82 (currently amended). A method of manufacturing an agent
for suppressing the expression of a selected gene in a
eukaryotic cell, including ~~a step of~~ using a gene in the
preparation of said agent wherein said gene is selected from (a)

a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene, which site is present in a eukaryotic genome, and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with a selected gene, which site is present in a plant or animal genome, and a chromatin inactivation portion, wherein the nucleic acid binding portion is estrogen receptor (ER) or androgen receptor (AR) ~~a DNA binding part of a nuclear receptor DNA binding protein~~ and the chromatin inactivation portion is ~~all or a N-CoR or SMRT binding part of PLZF~~.

83-84 (canceled).

85 (currently amended). A method of manufacturing a medicament for suppressing the expression of a selected gene in a eukaryotic cell, said method including ~~a step of using a gene~~ in the preparation of said medicament wherein said gene is selected from (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene which site is present in a eukaryotic genome and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with a selected gene which site

is present in a plant or animal genome and a chromatin inactivation portion wherein the nucleic acid binding portion is estrogen receptor (ER) or androgen receptor (AR) ~~a DNA binding part of a nuclear receptor DNA binding protein~~ and the chromatin inactivation portion is ~~all or a N-CoR or SMRT-binding part of~~ PLZF.

86(currently amended). A composition selected from pharmaceutical compositions and compositions used in medicine selected from (a) a polypeptide comprising a nucleic acid binding portion which binds to a site at or associated with the selected gene which site is present in a eukaryotic genome and a chromatin inactivation portion, or (b) a polynucleotide encoding a polypeptide, wherein the chromatin inactivation portion is ~~selected from all or a N-CoR or SMRT-binding part of~~ PLZF and wherein the nucleic acid binding portion is estrogen receptor (ER) or androgen receptor (AR) ~~selected from all or a DNA binding part of a nuclear receptor DNA binding protein.~~

87(previously presented). A composition according to claim 86 including a pharmaceutically acceptable carrier.

88(previously presented). A composition according to claim 86 wherein the composition is a polypeptide.

89-106(canceled).